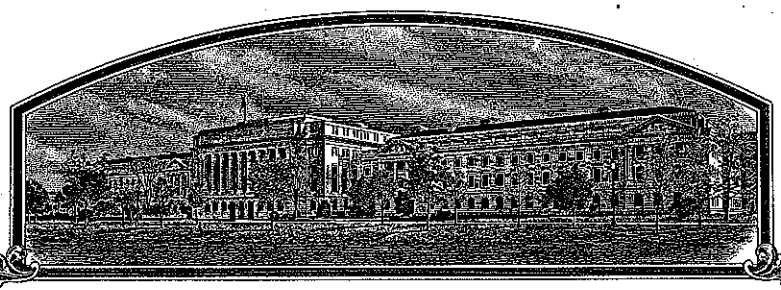

No. 200300150

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Pure Seed Testing, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

FESCUE, RED

'Aberdeen'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of Washington, D.C. this sixth day of February, in the year two thousand and seven.*

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

REPRODUCE LOCALLY. *Include form number and date on all reproductions.*

FORM APPROVED - OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROCTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C 2426).

1. NAME OF OWNER
Pure Seed Testing, Inc.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME
PST-EFL

3. VARIETY NAME
Aberdeen

4. ADDRESS *(Street and No., or RFD No., City, State, and ZIP Code, and Country)*
P.O. Box 449
Hubbard, OR 97032

5. TELEPHONE *(include area code)*
263-0719
(503) ~~651-2130~~
(BT:11/22/2006)

FOR OFFICIAL USE ONLY
PVPO NUMBER
200300150

6. FAX *(include area code)*
(503) 263-0703

FILING DATE
February 10, 2003

7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.)*
Corporation

8. IF INCORPORATED, GIVE STATE OF INCORPORATION
Oregon

9. DATE OF INCORPORATION
1975

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. *(First person listed will receive all papers)*
Crystal Rose-Fricker
Pure Seed Testing, Inc.
P.O. Box 449
Hubbard, OR 97032

FEES RECEIVED

FILING AND EXAMINATION FEES:
$ 2705 -
DATE 2/10/03

CERTIFICATION FEE:
$ 768.00
DATE 11/22/2006

11. TELEPHONE (Include area code)
(BT:11/22/06) (503) ~~651-2130~~ 263-0719

12. FAX (Include area code)
(503) 263-0703

13. E-MAIL
crystal@turf-seed.com ~~Pureseedtesting.com~~
(BT:11/22/2006)

14. CROP KIND (Common Name)
Strong Creeping Red Fescue

18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)

a. ☒ Exhibit A. Origin an Breeding History of the Variety
b. ☒ Exhibit B. Statement of Distinctness
c. ☒ Exhibit C. Objective Description of Variety
d. ☒ Exhibit D. Additional Description of the Variety *(Optional)*
e. ☒ Exhibit E. Statement of the Basis of the Owner's Ownership
f. ☒ Voucher Sample *(2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository)*
g. ☒ Filing and Examination fee ($2,705), made payable to "Treasurer of the United States" *(Mail to the Plant Variety Protection Office)*

19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(a) of the Plant Variety Protection Act)

☐ YES *(If "yes," answer items 20 and 21 below)* ☒ NO *(If "no," go to item 22)*

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? ☒ YES ☐ NO

IF YES, WHICH CLASSES? ☒ FOUNDATION ☒ REGISTERED ☒ CERTIFIED

21. DOES THE OWNER SPECIFY THAT THE CLASSES BE LIMITED AS TO NUMBER OF GENERATIONS? ☒ YES ☐ NO

IF YES, SPECIFY THE NUMBER 1, 2, 3, *etc.* 6 ☒ FOUNDATION 6 ☒ REGISTERED 7 ☒ CERTIFIED

(If additional explanation is necessary, please use the space indicated on the reverse.)

22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U.S. OR OTHER COUNTRIES?

☒ YES ☐ NO

IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSTION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. *(Please use space indicated on reverse.)*

23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT *(PLANT BREEDER'S RIGHT OR PATENT)*?

☐ YES ☒ NO

IF YES, GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. *(Please use space indicated on reverse.)*

24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER
Crystal Rose-Fricker

NAME *(Please print or type)*
Crystal Rose-Fricker

CAPACITY OR TITLE
President

DATE 2/6/03

SIGNATURE OF OWNER

NAME *(Please print or type)*
Joseph K. Wipff, Ph.D.

CAPACITY OR TITLE
Taxonomist/Plant Breeder

DATE 2/6/03

INSTRUCTIONS

200300150

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be **received** in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to **reproduce** the variety, or for tuber reproduced varieties verification that a viable *(in the sense that it will reproduce an entire plant)* tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for $2,705 ($320 filing fee and $2,385 examination fee), payable to "Treasurer of the United States" *(See Section 97.6 of the Regulations and Rules of Practice.)* Partial applications will be held in the PVPO for not more that 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of $320 for issuance of the Certificate.

Plant Variety Protection Office
Telephone: (301) 504-5518
FAX: (301) 504-5291
Homepage: http://www.ams.usda.gov/science/pvp.htm

ITEM

18a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified.

18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:

(1) identify these varieties and state all differences objectively;
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences;
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.

18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.

18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, *etc.*

18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.

19. If "Yes" is specified *(seed of this variety be sold by variety name only, as a class of certified seed)*, the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if **"No"** has been specified, the applicant may change the choice. *(See Regulations and Rules of Practice, Section 97.103).*

21. *See Section 83 of the Act for the Contents and Term of Plant Variety Protection.*

22. *See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.*

23. *See Section 5.5 of the Act for instructions on claiming the benefit of an earlier filing date.*

21. CONTINUED FROM FRONT *(Please provide a statement as to the limitation and sequence of generations that may be certified.)*

22. CONTINUED FROM FRONT *(Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)*

Seed sold March 11, 2003 to Hubbard Seed, Hubbard, Oregon (BT: 9/26/2006 per applicant's authorization)

23. CONTINUED FROM FRONT *(Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)*

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the applicant/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. *(See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of Regulations and Rules of Practice.)*

To avoid conflict with other variety names in use, the applicant must check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center—East, Beltsville, MD 20705. Telephone: (301) 504-8089.

S&T-470 (2-99) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (6-98) which is obsolete.

Revised Exhibit A.

Origin and Breeding History of
Aberdeen (PST- EFL) Strong Creeping Red Fescue

Aberdeen (PST-EFL) strong creeping red fescue (*Festuca rubra* L. subsp. *rubra*) is a turf-type cultivar selected from the progenies of 31 clones.

One hundred percent of the harvested plants trace their maternal origin to a plant found in the Rose City Cemetery, Portland, OR. This plant contained a *Neotyphodium* endophyte currently referred to as the Rose City endophyte. Over 98 percent of the parental germplasm of EFL traces its origin to plants selected from old turfs of the United States during the period from 1962 through 1990 by turfgrass scientists at the New Jersey Agricultural Experiment Station. These sources were used to pollinate the Rose City material. Plants selected from old turfs were subjected to evaluation in spaced-plant nurseries, frequently mowed turf trials, and greenhouse test for resistance to powdery mildew (caused by *Erysiphe graminis* DC). Progenies from intercrossing the best performing selections were then subjected to many cycles of recurrent phenotypic selection with each cycle followed by single-plot progeny tests in closely mowed turf trials. Tillers were subsequently selected from the best performing turf plots to initiate additional cycles of selection. Greenhouse facilities were also used to select disease resistant, lower-growing plants with abundant tillers, and a rich, bright, dark green color.

Two populations 'FLL' and 'FDL' were developed in the spring of 1996. FLL was selected for low-growth habit, fine leaf texture and medium-fine green color. FDL was selected for low-growth habit, fine leaf texture, high shoot density and dark-green color. In the fall of 1996, a nursery was established from plants from these two crossing blocks consisting of 1980 plants.

In the spring of 1997, thirty-five plants were selected from this nursery for early maturity, fine-leaf texture, high seed yield potential and medium-light green color and moved to an isolated crossing block designated 'EFL'. Four plants from this crossing were not harvested due to poor floret fertility. The remaining 31 plants were harvested from this crossing block. One turf plot of each line was established at Adelphia in the fall of 1997 and 1 gram of seed of each was sent to Pure Seed Testing, Inc. for increase and further nursery evaluation.

The fall of 1998 a spaced plant nursery of 2900 plants was established, 100 plants from each one-gram sample, at Pure Seed Testing near Hubbard, Oregon.

During the spring of 1999 seed from each one-gram sample of the 31 plants were checked for *Neotyphodium* endophyte. This information was used to denote rows in the nursery that were positive and negative for endophyte. The nursery was rogued for uniformity, good seed head number, rust resistance, the absence of choke symptoms, and good fertility. Six hundred and forty-five plants were allowed to pollinate and 506 plants with the best seed set were harvested as breeder seed of Aberdeen strong creeping red fescue.

Seed production is limited to three generations of increase from breeder seed—one each of foundation, registered and certified. Pure Seed Testing, Inc maintains breeder seed.

Aberdeen has been a stable and uniform variety for five years now through breeder, foundation and certified generations. No off-type or variants have been observed in the production or multiplication of this variety. Aberdeen strong creeping red fescue and the parents of Aberdeen have produced turf of good quality and acceptable uniformity.

Revised Exhibit B.

Novelty Statement for Aberdeen (PST-EFL) (BT: 9/27/2006) Strong Creeping Red Fescue

Aberdeen (PST-EFL) (BT: 9/27/2006) strong creeping red fescue is most similar to the variety Shademaster II. Upon close comparisons the following differences were found.

1. PST-EFL has an initial heading date at least 5 days earlier than Shademaster II (see Table 1 and 2A).
2. PST-EFL is shorter than Shademaster II by at least 4.8 cm (see Tables 3A and 4A).
3. PST-EFL has a tiller leaf width at least 0.5 mm narrower than Shademaster II (see Tables 3A and 4A).
4. PST-EFL has a panicle length at least 1.3 cm shorter than Shademaster II (see Table 3A).
5. PST-EFL has a top flag leaf height at least 7.2 cm shorter than Shademaster II (see Table 4A).

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY PROGRAM
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

EXHIBIT C
(FINE LEAVED FESCUES)

OBJECTIVE DESCRIPTION OF VARIETY
FINE LEAVED FESCUES
(*Festuca* spp.)

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
Pure Seed Testing, Inc.	**PST-EFL**	**Aberdeen**

ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code)

P.O. Box 449, Hubbard, OR 97032

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PVPO NUMBER
200300150

Place the appropriate number that describes the varietal characteristics of this variety in the boxes below. Use leading zeroes when necessary. Characteristics described, including numerical measurements, should represent those that are typical for the variety. Measured data should be for SPACED PLANTS. Royal Horticultural Society or any recognized color fan may be used to determine plant colors; designate system used: _____. Describe location of the test area, conditions and number of plants used: _____

1. SPECIES: (With companion varieties for use below – use varieties within species of application variety)

[3]	1 = *F. rubra* ssp. *commutata* (Chewings)	11 = Cascade 14 = Banner	12 = Highlight 15 = Barfalla	13 = Jamestown
	2 = *F. rubra* ssp. *litoralis* (Creeping Red)	21 = Dawson 24 = Pennlawn	22 = Starlight	23 = Merlin
	3 = *F. rubra* ssp. *rubra* (Spreading Red)	31 = Boreal 34 = Ensylva	32 = Ruby	33 = Fortress
	4 = *F. ovina* (Sheep)	41 = Covar		
	5 = *F. longifolia* (Hard)	51 = Durar	52 = Biljart (C-26)	53 = Scaldis
	6 = *F. tenuifolia* (Fine-Leaved Sheep)	61 = Panda	62 = Barok	

7 = Other (*Specify*) F. _____

2. CYTOLOGY:

[5][6] Chromosome Number [4] Ploidy 1 = diploid 2 = tetraploid 3 = hexaploid 4 = octoploid

3. ADAPTATION: (0 = Not Tested; 1 = Not Adapted; 2 = Adapted)

[2] Northeast [2] Southeast [2] North Central [2] Pacific N.W.

[ ] Other (Specify) : _____

6.

4. MATURITY: Date First Headed (panicle emergence) Location(s) of Trail(s) Pure Seed Testing near Hubbard, Oregon.

200300150

[3] Maturity Class: April 1 – See Table 1

1 = Very Early (Covar) 2 = Early (Highlight) 3 = Medium Early (Boreal, Dawson)

4 = Medium Late (Cascade, Ruby) 5 = Late (Jamestown, Agram) 6 = Very Late

Date Headed _____

[0][6] Days earlier than ..... [3][1]

Maturity same as ..... [ ][ ] } Comparison Variety

[ ][ ] Days later than ..... [ ][ ]

---

5. PLANT HEIGHT: (At maturity; to top of panicle; average of 10 tallest culms) See Table 4A

[7][9][5] mm Height

[ ][9][6] mm shorter than ..... [3][4]

Height same as ..... [ ][ ] } Comparison Variety

[ ][ ][ ] mm Taller than ..... [ ][ ]

---

6. GROWTH HABIT:

[2] 1 = Erect (Ruby) 2 = Semi-erect (Highlight) 3 = Prostrate (Silvana)

---

7. RHIZOMES: ***No longer needed***

[ ][ ][ ] mm Length [ ][ ] mm Width [ ][ ] mm Internode length

[4] 1 = Absent 2 = Weakly Creeping (Dawson)

3 = Strongly Creeping (Boreal) 4 = Very Strongly Creeping (Boreal)

---

8. LEAF BLADE:

[4] Color:

1 = Light Green (Starlight) 2 = Medium Light Green (Highlight) 3 = Medium Dark Green (Ruby, Agram)

4 = Dark Green (Jamestown, Manoir) 5 = Bluegreen (Saphir) 6 = Graygreen (Scaldis)

7 = Other (Specify): _____

[1] Glaucosity (Sowing Year): 1 = Absent 2 = Present (Vendome)

[1] Anthocycnin; 1 = Absent 2 = Present [1] Hairs (Basal): 1 = Absent 2 = Present

[1] Margins: 1 = Smooth 2 = Semi-rough 3 = Rough

[3] Margin folding (closure): 1 = Rolled inward (closed-Highlight) 2 = Flat 3 = Folded

[2] Width class: 1 = Very fine (Agram, Frida) 2 = Fine (Jamestown, Highlight, Banner, Dawson)

3 = Medium Fine (Fortress, Ruby, Scaldis) 4 = Medium Coarse (Engina)

8. LEAF BLADE (*Continued*): See Table 4A

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[9][5] mm Length (flag leaf)

[2][4] mm Shorter than ..... [3][4]

Blade length same as ..... [ ][ ] } Comparison Variety

[ ][ ] mm Longer than ..... [ ][ ]

[1][0] mm Width (flag leaf)

[1][9] mm Narrower than ..... [3][4]

Blade width same as ..... [ ][ ] } Comparison Variety

[ ][ ] mm Wider than ..... [ ][ ]

---

9. LEAF SHEATH:

[1] Anthocyanin (seedling): 1 = Absent (Highlight) 2 = Present (Jamestown, Fortress, Marga)

[1] Auricle Hairiness: 1 = Absent 2 = Present

[1] Margins: 1 = Open (Highlight) 2 = Closed (Jamestown)

---

10. PANICLE:

[1] Shape: 1 = Narrow-tapering 2 = Ovate

3 = Oblong 4 = Other (Specify): _____

[2] Type: 1 = Open 2 = Intermediate 3 = Compact

[1] Orientation: 1 = Erect 2 = Nodding

[2] Branch Pubescence: 1 = Glabrous 2 = Pubescent

[6] Anther Color: } 1 = Yellowish Green 2 = Green 3 = Bluish Green 4 = Purplish

5 = Reddish 6 = Other (Specify): Yellow/Purple

[2] Glume Color at 50% flowering): }

[1][1][7] mm Length Table 4A

[3][0] mm Shorter than ..... [3][4]

Panicle length same as ..... [ ][ ] } Comparison Variety

[ ][ ] mm longer than ..... [ ][ ]

---

11. PALEA:

[2] Hairs (On keels or margins): 1 = Absent (Banner) 2 = Short (Agram, Scaldis, Olds)

3 = Long (Rainier, Fortress, Jamestown)

12. LEMMA:

200300150

[2] Hairs: 1 = Absent (Jamestown) 2 = Several 3 = Many (Highlight)

[5][9] mm Lemma Length

[1][2] mm Shorter than ..... [3][4]

Lemma length same as ..... [ ][ ] } Comparison Variety

[ ][ ] mm Longer than ..... [ ][ ]

[1][2][0] mm Lemma Width

[ ][ ][ ] mm Narrower than ..... [ ][ ]

Lemma width same as ..... [ ][ ] } Comparison Variety

[0][2][5] mm Wider than ..... [3][4]

[2] Awns: 1 = Absent 2 = Present

[1] mm Awn Length

[0][3] mm Shorter than ..... [3][4]

Awn length same as ..... [ ][ ] } Comparison Variety

[ ][ ] mm Longer than ..... [ ][ ]

13. SEED (With lemma and palea):

[3] Size Class (g/1000 seed):

1 = [< 0-.9g] (Biljart, Dawson) 2 = [0.9-<1.1g] (Jamestown, Highlight)

3 = [1.1 – 1.3g] (Fortress, Novorubra) 4 = [>1.3g] (Boreal, Golfrood)

[1][2][0][3] mg per 1000 seed

[ ][1][7][4] mg per 1000 seed less than ..... [3][4]

Seed Weight same as ..... [ ][ ] } Comparison Variety

[ ][ ][ ][ ] mg per 1000 seed more than ..... [ ][ ]

14. DISEASE, INSECT, AND NEMATODE REACTION 0 = Not Tested 1 = Highly susceptible 4 = moderately susceptible 6 = Moderately resistant 9 = Highly resistant

[6] Melting-out *Drechslera poae* (*Helminthosporium vagans*)

[6] Leaf Spot *D. siccans*

[6] Net Blotch *D. dictyoides*

[6] Leaf Spot *Bipolaris sorokiniana*

[6] Brown Patch *Rhizoctonia solani*

[9] Powdery Mildew *Erysiphe graminis*

[0] Stripe Smut *Ustilago striiformis*

[9] Stripe Rust *P. striiformis*

[9] Leaf Rust *P. poae-nemoralis*

[9] *P. crandallii*

[0] Pythium Blight *Pythum ultimum*

[6] Red Thread *Corticium fusciforme*

[9] Dollar Spot *Sclerotinia homoeocarpa*

[9] Microdochium patch

14. DISEASE, INSECT, AND NEMATODE REACTION (*Continued*):

[9]	F. Patch, Pink snow-mold *Fusarium nivale*	[0]	Nematode _____
[0]	Fusarium Blight *F. trincinctum, F. roseum*	[ ]	Other _____
[0]	Gray Snow Mold *Typhula iotana*	[ ]	Other _____
[9]	Stem Rust *Puccinia graminis*	[ ]	Other _____

15. GIVE THE VARIETY OR VARIETIES THAT MOST CLOSELY RESEMBLE THE APPLICATION VARIETY. For the following characteristics indicate Degree of Resemblence by placing in the column marked D.R., one of the following numbers.

1 = Application variety is less than the comparison variety. 2 = Application variety is the same as the comparison variety.

3 = More than, better, greater, darker, more disease resistant, etc.

CHARACTER	VARIETY	D.R.	CHARACTER	VARIETY	D.R.
Rhizome Length	Ensylva	2	Growth Habit	Ensylva	2
Leaf Width	Ensylva	2	Leaf Color	Ensylva	3
Panicle Color	Ensylva	2	Panicle Shape	Ensylva	2
Winter Color	Ensylva	3	Cold Injury	Ensylva	2
Shade Tolerance	Ensylva	3	Heat	Ensylva	2
Drought	Ensylva	3	Disease*		

* Specify each disease evaluated.

16. ADDITIONAL DESCRIPTION: See Exhibit D

Exhibit D.

Additional Description of Aberdeen (PST-EFD) Strong Creeping Red Fescue (BT: 9/27/2006)

Aberdeen (PST-EFD) (BT: 9/27/2006) has good turf performance, good winter color and good resistance to leaf spot, red thread, michrodochium patch, dollar spot, brown patch, summer patch, net blotch, pink snow mold and pink patch (see Tables 2-23).

Table 1. Mean initial heading dates for entries in a fine fescue seed yield trial seeded fall of 1998 near Hubbard, OR. (national test)

Entry	2000
Shademark	01-April
(PST-EFL) Aberdeen CBT: 4/27/2000	**01-April**
SRX 52961+	03-April
PST-4FR	03-April
SRX 5LAV	04-April
PST-47TCR	04-April
SR 3200	05-April
ISI FRR 7	05-April
Bighorn	06-April
Boreal	07-April
Florentine	07-April
Common Creeping Red	07-April
MB 63	08-April
PST-4MB	08-April
Shademaster II	08-April
Tiffany	10-April
Victory II	11-April
MB 61	11-April
Banner III	11-April
Brittany	11-April
Seabreeze	11-April
ISI FRR 5	11-April
Pick FRC 2-96	12-April
ABT CHW 3	12-April
Shadow II	12-April
MB 64	12-April
Victory	12-April
SR 5100	12-April
Longfellow II	13-April
Pick FRC 4-92	13-April
Sandpiper	13-April
Spartan	13-April
ABT CHW 2	13-April
ABT HF 4	13-April
ISI FL 12	14-April
ABT HF 1	14-April
ISI FL 11	14-April
Defiant	14-April
SRX 3961	14-April
Osprey	14-April
Dawson E+	14-April
Quatro	14-April
Jamestown II	15-April
Treazure (E)	15-April
Reliant II	15-April
ABT HF 2	15-April
Nordic (E)	15-April
4001	15-April
SR 3100	16-April
PST-4HM	16-April
MB 82	16-April
Discovery	16-April
Scaldis	17-April
LSD (0.05)	**4 days**

Table 2. 2000 mean turfgrass quality ratings of strong creeping red fescue cultivars grown at twenty-nine locations in the US and Canada (9 = ideal)[1]

Entry	AR	CA	IA	IL	IN	KS	KY	MA	MD	ME1	ME2	MI	MO	MT	NC	NJ1	NJ2	NS	NY	OK	PA	QE	RI	SD	UT	VA	WA1	WA3
Cindy Lou	4.7	6.3	5.1	5.0	6.6	7.1	7.4	5.9	6.4	7.2	7.1	6.6	4.4	5.6	5.9	6.4	6.1	6.8	3.6	3.8	5.8	5.3	6.8	5.3	5.4	6.3	5.0	4.3
Jasper II	6.3	6.2	5.1	5.5	6.6	7.0	7.8	5.9	6.3	7.2	6.3	6.5	5.0	5.6	6.0	6.5	5.9	6.9	3.1	3.1	5.6	5.1	5.8	5.3	5.2	6.1	4.9	4.4
SRX 52961	5.7	5.6	5.4	5.5	7.0	6.4	7.5	5.5	6.3	6.9	7.4	6.5	4.3	5.7	5.2	6.2	6.0	6.8	2.9	3.9	5.3	5.5	6.4	5.8	5.1	5.6	5.1	4.8
Navigator	5.7	6.0	5.4	5.0	6.6	7.6	7.3	5.5	6.1	7.0	6.7	6.4	5.0	5.4	6.1	5.8	5.5	6.3	2.7	4.0	5.8	5.4	6.1	5.7	4.4	5.8	4.6	4.5
ABT-CR-3	5.6	5.8	5.1	4.5	6.3	6.0	7.6	5.5	6.6	7.5	6.8	6.3	4.4	5.6	6.0	5.9	5.5	6.8	3.7	2.9	5.5	5.3	6.7	5.6	4.4	6.1	4.8	4.8
(PST-EFL) Aberdeen	5.3	6.1	5.0	5.0	5.9	6.9	7.4	5.0	6.4	6.7	6.3	6.4	4.3	5.9	4.8	5.9	5.7	6.4	2.9	3.3	5.3	5.2	5.9	5.3	5.0	5.8	4.7	4.4
PST-47TCR	3.8	5.7	4.9	5.0	5.9	6.0	6.6	5.0	5.7	6.8	6.8	6.4	4.3	5.8	4.5	4.9	4.3	4.8	3.8	3.3	4.4	5.3	6.4	5.4	4.4	4.7	4.7	4.4
PST-4FR	4.4	6.4	5.9	5.0	5.0	6.0	6.5	5.7	5.8	6.4	7.4	6.1	4.8	5.8	4.8	4.6	3.3	5.1	3.4	2.4	3.9	5.1	4.1	5.3	5.0	4.4	5.0	4.7
Pathfinder	4.6	6.0	4.8	4.9	4.9	6.6	6.9	5.3	5.4	6.2	6.9	6.3	5.0	5.7	5.3	4.6	4.1	6.0	3.5	3.0	2.9	5.1	3.6	5.4	4.9	5.1	5.0	4.5
Florentine	2.4	5.5	4.7	4.8	4.8	5.4	6.7	4.9	5.7	7.3	7.1	6.2	4.0	6.1	5.0	5.0	4.3	5.3	3.3	2.4	3.5	5.1	5.8	5.6	5.2	4.6	5.1	4.1
BAR CF 8 FUS1	4.8	6.1	5.2	4.3	5.3	6.0	6.6	4.8	5.1	6.5	7.1	6.4	4.1	5.3	4.8	4.8	3.8	5.5	3.4	3.0	3.4	5.1	5.5	5.3	4.0	4.4	4.9	4.8
SR 5210	3.7	5.5	4.7	5.0	5.8	7.0	7.0	4.9	5.7	5.7	5.9	6.0	3.7	5.0	5.1	4.6	4.7	4.9	3.2	2.4	5.0	5.3	5.0	4.3	4.1	5.0	4.6	4.0
Shademaster II	3.9	6.1	4.8	4.8	4.7	6.1	6.0	4.9	5.4	6.1	6.5	6.2	4.3	5.4	5.1	3.9	5.2	2.9	2.9	2.9	5.3	3.8	5.4	4.5	5.5	4.5	4.5	4.1
DGSC 94	4.3	6.2	4.9	4.9	4.8	6.0	6.6	5.2	5.3	6.7	6.6	6.1	4.0	5.4	4.0	4.8	4.3	5.0	3.5	3.2	2.8	5.1	3.5	5.1	4.5	5.0	4.3	4.4
ASC 082	3.6	5.8	4.7	4.3	5.0	6.1	5.9	5.0	4.8	5.9	6.2	6.1	3.8	5.1	5.0	4.8	4.3	5.5	3.0	2.4	4.5	4.8	5.2	3.8	4.2	5.1	4.3	4.2
Shademark	4.5	5.8	4.8	4.7	5.1	6.3	6.3	4.9	5.4	6.1	6.3	6.3	3.6	5.1	4.2	3.8	4.1	4.8	3.4	2.8	2.1	4.9	5.1	5.2	4.0	4.4	4.5	4.1
Rose	4.7	5.9	5.0	4.5	4.5	4.5	5.7	5.7	4.6	5.3	5.6	6.2	6.1	3.0	5.3	3.9	4.4	3.7	4.8	3.1	2.7	2.7	4.9	5.4	4.3	4.2	4.4	4.9
ASC 172	3.1	5.1	5.1	3.8	3.9	4.6	5.8	4.4	4.7	6.1	6.5	5.6	3.2	5.0	3.9	4.1	3.6	4.5	3.2	2.0	3.9	4.3	3.9	4.1	4.0	4.3	4.4	3.5
Boreal	3.2	5.3	4.6	4.3	4.7	5.0	5.2	4.5	4.5	5.6	5.6	5.7	3.6	5.3	4.2	2.3	3.3	4.8	3.2	1.4	3.0	4.9	3.2	4.0	4.0	3.8	4.2	4.0
Common Creeper	3.3	4.9	4.3	4.3	4.2	5.2	5.1	4.0	4.6	5.9	5.4	5.5	3.3	5.0	3.4	3.3	3.0	4.9	3.5	1.5	2.7	4.8	2.5	4.8	3.6	3.4	4.1	4.0
LSD (0.05)	1.0	0.4	1.2	0.7	0.9	1.4	0.7	0.7	0.7	1.0	1.4	0.4	0.8	0.7	1.0	0.8	0.8	2.0	0.9	1.0	1.1	0.4	1.0	0.7	0.8	0.9	0.5	0.8

See Table 27

Table 3. 1999 mean turfgrass quality ratings of strong creeping red fescue cultivars grown at twenty-nine locations in the US and Canada (9 = ideal)[1]

Entry	CA	CO	IA	IL	IN	KS	KY	MA	MD	ME1	ME2	MI	MO	MT	NC	NJ1	NJ2	NS	NY	OK	PA	QE	RI	SD	UT	VA	WA1	WA3
Jasper II	5.9	5.5	6.4	5.6	5.4	7.9	7.7	5.6	7.4	7.2	7.2	6.4	6.4	5.1	5.7	6.6	5.7	6.8	6.2	4.3	6.6	4.6	6.3	4.6	5.6	5.3	5.0	5.6
PST-EFL*	5.7	4.6	6.6	5.2	5.6	7.9	7.3	5.0	6.8	7.1	7.2	6.1	6.5	5.8	4.7	5.9	5.1	6.9	5.1	4.0	5.8	4.5	5.8	4.5	4.6	5.1	4.4	5.3
Florentine	5.6	4.7	6.3	4.9	5.2	7.8	7.5	4.5	7.0	7.4	7.4	5.8	6.0	5.6	5.3	5.4	5.3	6.5	5.5	3.6	5.7	4.5	5.8	4.5	5.2	4.4	5.0	5.5
Shademaster II	5.3	4.9	6.0	5.1	4.6	7.6	7.0	4.5	6.8	7.1	7.1	5.9	7.0	5.9	5.6	5.3	4.6	6.4	5.3	4.6	5.2	4.8	6.0	4.6	5.0	5.0	4.6	5.1
Boreal	3.7	4.4	5.6	5.0	4.4	5.4	5.2	3.9	5.1	6.2	5.8	5.5	5.2	6.1	4.8	2.2	2.9	6.2	5.3	3.0	3.8	4.4	3.1	3.5	4.6	3.7	2.6	4.8
Common Creeper	3.8	4.4	5.3	5.2	3.8	5.7	5.1	3.7	5.3	5.7	5.8	5.6	4.4	5.7	4.5	2.8	2.8	6.0	5.0	3.0	4.1	4.5	2.4	3.9	4.3	3.9	3.1	4.7
LSD (0.05)	0.7	0.2	1.0	0.5	0.8	0.9	0.5	0.9	0.4	0.7	0.6	0.7	1.2	0.9	0.6	0.8	0.5	1.0	0.7	0.7	0.6	0.3	1.0	0.7	1.1	0.6	1.0	0.6

Tables 3-26 contain selected data including top and bottom commercially available entries and selected standards.

*PST-EFL = Aberdeen (on 9/27/00)

Table 2A. 2003 mean initial heading dates for entries in a fine fescue seed yield trial seeded fall of 2002 near Hubbard, OR.

Entry	Mean
Ambassador	30 April
PST-4CHU	27 April
PST-HE1	22 April
Shadow II	21 April
Scaldis	21 April
Aurora Gold	20 April
PST-4HM	19 April
Treazure	19 April
Tiffany	19 April
Oxford	18 April
Aurora	18 April
Aurora II	17 April
PST-8000	17 April
Dawson	17 April
Nordic E	17 April
Discovery	15 April
Pathfinder	15 April
Shademaster II	12 April
PST-4SU	12 April
Inverness	12 April
Florentine	11 April
PST-4CR1	11 April
PST-4FRR	10 April
PST-4MB	09 April
Trapeze	09 April
Flyer	09 April
Camilla	09 April
Miramar (Flyer II)	09 April
Shadow	08 April
Polaris	08 April
Seabreeze	08 April
Little Bighorn	07 April
PST-EFL*	**07 April**
Bighorn	07 April
LSD (0.05)	**4 days**

* PST-EFL=Aberdeen (BT:9/27/'06)

Table 3A. Mean morphological measurements for entries in a fine fescue seed yield trial seeded fall of 1999 near Hubbard, OR.

	2000		2001	
Entry	Panicle Length (cm)	Plant Height (cm)	Panicle Length (cm)	Tiller Leaf Width (mm)
Longfellow	12.9	85.8	13.4	2.8
4CRE-98	14.6	82.5	14.0	3.0
Shademaster II	15.1	82.2	13.0	3.1
4FRR-99	11.8	81.0	12.7	2.3
4EC-99	11.3	78.6	12.8	2.3
Enjoy	11.3	77.5	12.9	2.3
PST-EFL*	**10.9**	**77.4**	**11.7**	**2.6**
Discovery	--	76.6	8.4	1.1
4FR-99	11.8	75.3	13.3	2.5
Aurora E	8.9	75.3	8.9	1.2
Shadow II	11.5	73.7	11.4	2.3
4BBL	11.5	72.4	13.2	2.8
47TCL	11.9	70.7	11.7	3.0
Bighorn	9.1	69.4	8.0	1.2
47TH-98	9.1	67.5	8.1	1.3
4MB-99	7.8	67.0	8.3	1.2
4UB	8.5	66.9	7.9	1.1
4HM-99	8.3	65.3	9.1	1.1
4BLUE-99	9.5	62.2	11.2	3.0
4AU-99	8.2	61.9	9.5	1.1
LSD (0.05)	**1.5**	**2.2**	**0.8**	**0.2**

*PST-EFL=Aberdeen (ST: 9/27/06)

Table 4. 2000 mean genetic color ratings of strong creeping red fescue cultivars grown at twenty-eight locations in the US and Canada (9 = dark green)

Entry	AR	CA	IA	IL	IN	KS	KY	MA	MD	MI1	M12	MT	NC1	NC2	NE	NJ	NS	NY	OK	QE	RI	SD	UT	VA	WA1	WA3	WI1	W12	Mean
ASC 172	8.7	6.0	4.3	3.3	6.7	7.7	9.0	6.7	6.7	7.7	7.0	8.0	7.3	8.7	5.0	8.0	7.7	7.0	7.3	7.0	8.3	7.7	8.0	7.7	7.0	8.0	7.0	7.0	7.2
Florentine	7.0	6.7	5.3	4.7	4.7	7.3	9.0	6.7	7.0	7.0	7.3	8.3	8.0	8.0	7.0	6.7	7.0	7.0	7.3	6.7	6.7	7.0	6.0	6.7	7.7	7.0	7.0	7.0	6.9
PST-EFL*	7.0	7.0	5.3	5.7	5.7	8.0	8.3	6.0	6.7	7.0	7.0	8.0	7.3	6.7	6.0	4.3	7.0	6.3	7.0	6.3	5.7	6.7	5.3	5.7	6.7	6.7	6.7	7.0	6.5
Shademaster II	7.3	6.0	5.7	5.0	5.7	7.3	7.7	6.0	6.3	7.0	7.0	7.3	7.0	6.7	7.3	3.7	6.0	6.0	7.0	6.0	6.0	5.7	6.3	6.7	7.3	6.7	6.7	6.7	6.4
Boreal	6.0	6.3	5.7	4.0	4.7	7.0	8.7	7.3	6.3	6.3	7.0	6.3	6.0	7.3	7.7	5.0	4.0	6.3	5.3	7.0	5.7	6.0	5.0	6.0	6.3	6.0	6.7	6.3	6.1
Common Creeper	6.0	3.7	5.7	4.0	5.0	6.7	8.0	6.7	6.3	7.0	7.0	5.3	6.3	8.0	5.3	2.7	6.3	5.7	7.0	5.3	6.0	5.3	4.3	6.0	5.7	6.0	6.7	6.7	5.9
LSD (0.05)	1.2	1.6	1.2	1.1	1.2	1.0	0.7	2.1	0.7	0.2	0.5	1.3	1.6	1.5	1.4	1.6	1.7	1.0	0.5	0.7	1.3	0.9	1.4	1.1	1.0	0.6	0.5	0.7	0.2

Table 5. 1999 genetic color ratings of strong creeping red fescue cultivars grown at twenty-four locations in the US and Canada (9 = dark green)

Entry	CA	CO	IA	IL	KY	ME1	ME2	MD	MT	NC1	NC2	NE	NS	NY	OK	PA	QE	RI	SD	UT	VA	WA3	WI1	WI2	Mean
ASC 172	6.3	8.0	7.0	4.3	9.0	8.7	8.3	6.0	7.0	8.0	9.0	7.0	7.7	7.0	7.3	9.0	6.3	7.7	6.3	4.7	5.3	7.7	8.0	8.0	7.2
Florentine	6.3	8.0	7.0	5.7	7.3	7.3	7.3	5.7	7.0	7.0	8.3	6.3	7.3	7.0	7.3	8.0	6.0	7.3	6.0	6.0	5.7	6.0	7.7	7.3	6.9
Shademaster II	5.3	7.3	6.3	5.3	6.0	7.7	8.0	6.7	6.3	6.7	7.0	6.0	6.3	6.0	6.7	7.0	6.0	6.3	6.0	5.3	6.0	6.0	7.3	7.0	6.4
PST-EFL*	5.7	6.0	6.3	5.7	7.0	7.3	7.3	5.0	6.7	6.0	7.7	6.7	6.0	6.3	7.0	7.0	6.0	5.3	6.0	6.0	5.7	6.0	7.3	7.0	6.4
Boreal	4.3	6.3	5.7	5.3	7.0	5.3	6.3	5.3	6.0	6.3	7.3	5.7	6.3	5.3	6.0	5.7	6.0	7.0	5.0	3.3	5.3	6.0	7.0	7.0	5.9
Salsa	4.3	8.0	6.3	5.7	4.0	5.3	6.3	4.7	5.3	5.7	5.7	6.3	5.0	5.7	5.7	4.7	5.7	6.0	4.3	3.7	5.3	5.3	7.0	6.3	5.5
LSD (0.05)	1.0	0.5	1.3	1.2	0.8	1.2	1.1	1.6	0.9	0.9	1.2	1.3	1.2	0.9	1.1	0.8	0.4	1.0	1.3	1.6	1.5	0.8	0.7	0.8	0.2

*PST-EFL=Aberdeen
(BT 9/27/2006)

Table 4A. Mean morphological measurements for entries in a fine fescue seed yield trial seeded fall of 1998 near Hubbard, OR.

	1999				2000		
	Tiller Leaf Width (mm)	Top Flag Leaf Height (cm)	Plant Height (cm)	Panicle Length (cm)	Top Flag Leaf Height (cm)	Flag Leaf Length (cm)	Flag Leaf Width (mm)
Dawson	2.0	43.6	90.0	12.3	39.7	10.3	2.5
Shadow	1.6	44.7	89.8	14.0	45.2	11.2	2.5
Ensylva	2.5	39.0	89.1	14.7	37.8	11.9	2.9
Seabreeze	1.9	40.4	88.4	11.8	38.6	8.2	2.2
Laxton	1.7	40.4	87.4	14.3	32.4	11.7	3.3
Shadow II	1.4	42.4	87.2	13.7	43.0	10.8	2.8
Camilla	2.5	37.1	86.0	12.8	37.8	10.6	1.0
Tiffany	1.5	37.2	86.0	13.1	39.0	11.1	2.6
4FRR	2.7	42.2	85.4	14.4	29.2	10.2	2.9
Shademaster II	2.1	38.1	84.8	13.7	34.9	11.6	3.1
Inverness	2.8	28.8	79.7	12.1	31.0	10.1	2.9
PST-EFL*	**1.6**	**30.9**	**79.5**	**11.7**	**24.9**	**9.5**	**1.0**
PST-4S3E	1.1	36.9	78.5	11.9	29.5	9.2	1.0
4FR	1.7	36.8	76.2	15.9	31.7	10.5	2.7
Florentine	1.6	31.9	75.7	12.1	30.8	10.5	2.9
4BBL	2.5	32.2	75.6	13.0	32.0	10.1	1.0
Aurora E	1.0	27.4	73.4	10.0	28.1	7.0	1.2
Aurora Gold	1.0	26.8	70.3	9.0	24.2	6.1	1.0
Bighorn	1.0	23.9	69.6	8.9	23.5	5.4	1.4
Little Bighorn	1.0	29.5	69.1	8.7	24.4	5.5	1.1
Discovery	1.1	29.2	67.8	8.4	24.9	6.0	1.3
4BLUE	2.1	38.3	67.2	10.2	28.4	8.6	1.0
4MB	1.0	24.7	65.9	8.5	20.2	6.1	1.1
Aurora II	1.0	25.6	65.1	9.4	25.1	5.9	1.0
4HM	1.0	26.8	64.5	8.5	19.6	5.2	1.0
47TH	1.0	23.9	63.3	9.1	23.5	5.6	1.1
Barcrown	1.0	33.1	57.1	8.8	28.9	7.1	1.9
LSD (0.05)	**0.2**	**2.2**	**2.6**	**2.3**	**2.0**	**0.7**	**0.3**

*~~PST-EFL~~=Aberdeen (BT:9/27/2006)

Table 6. 2000 mean winter color ratings of strong creeping red fescue cultivars grown at 2 locations in the US (9 = complete color retention)

Entry	OK1	VA1	Mean
Common Creeping Red	6.0	5.0	5.5
Florentine	5.7	5.3	5.5
Shademaster II	5.0	6.0	5.5
Boreal	6.0	4.7	5.3
PST-EFL*	**5.3**	**4.7**	**5.0**
Shademark	5.3	5.0	5.2
LSD (0.05)	**0.7**	**1.1**	**0.7**

Table 7. 1999 mean winter color ratings of strong creeping red fescue cultivars grown at 4 locations in the US (9 = complete color retention)

Entry	KY1	NJ1	OK1	VA1	Mean
Florentine	7.7	5.3	4.3	6.3	5.9
Shademaster II	6.7	6.0	4.3	5.7	5.7
PST-EFL*	**7.0**	**5.3**	**4.0**	**5.7**	**5.5**
Boreal	5.3	5.0	3.7	4.7	4.7
LSD (0.05)	**1.4**	**1.3**	**0.6**	**1.2**	**0.6**

Table 8. 1999 mean *Microdochium* patch ratings of strong creeping red fescue cultivars grown at 2 locations in the US (9 = no disease)

Entry	ME1	ME2	Mean
Salsa	8.0	8.3	8.2
Shademaster II	7.7	8.3	8.0
PST-EFL*	**8.3**	**7.0**	**7.7**
Florentine	7.7	7.0	7.3
Boreal	7.7	6.3	7.0
Jasper II	7.3	6.3	6.8
LSD (0.05)	**2.2**	**1.8**	**1.4**

Table 9. 2000 mean leaf spot ratings of strong creeping red fescue cultivars grown at 1 location in the US (9 = no disease)

Entry	NJ2
Jasper II	5.7
PST-EFL*	**5.0**
Florentine	4.7
Shademaster II	3.0
Boreal	2.0
LSD (0.05)	**1.3**

*PST-EFL=Aberdeen (BT: 9/27/2006)

Table 10. 1999 mean leaf spot ratings of strong creeping red fescue cultivars grown at 4 locations in the US (9 = no disease)

Entry	ME1	ME2	NJ1	NJ2	Mean
Jasper II	5.7	8.0	4.0	5.7	5.8
Florentine	5.3	8.0	2.0	4.3	4.9
PST-EFL*	**5.7**	**6.0**	**3.0**	**4.7**	**4.8**
Shademaster II	5.7	6.0	2.7	4.3	4.7
Boreal	3.3	4.3	2.7	2.0	3.1
Shademark	3.0	4.7	2.0	2.3	3.0
LSD (0.05)	**1.9**	**4.0**	**0.9**	**1.4**	**1.2**

Table 11. 2000 mean dollar spot ratings of strong creeping red fescue cultivars grown at 4 locations in the US (9 = no disease)

Entry	IN1	NJ2	PA1	WI2	Mean
Jasper II	7.7	8.0	7.7	5.0	7.1
PST-EFL*	**8.0**	**7.7**	**7.7**	**4.7**	**7.0**
Boreal	6.3	3.0	5.7	4.0	4.8
Florentine	6.0	3.0	4.7	4.0	4.4
Shademaster II	7.3	2.7	3.3	4.3	4.4
Pathfinder	5.3	1.0	3.0	3.3	3.2
LSD (0.05)	**2.5**	**1.7**	**2.3**	**0.9**	**1.0**

Table 12. 1999 mean dollar spot ratings of strong creeping red fescue cultivars grown at 1 location in the US (9 = no disease)

Entry	PA1
PST-EFL*	**7.7**
Florentine	6.0
Shademaster II	5.7
Boreal	4.3
LSD (0.05)	**1.7**

Table 13. 2000 mean red thread ratings of strong creeping red fescue cultivars grown at 4 locations in the US and Canada (9 = no disease)

Entry	ME2	NJ2	NS1	WA3	Mean
Boreal	7.3	8.0	5.7	6.0	6.8
PST-EFL*	**8.3**	**7.3**	**4.0**	**6.7**	**6.6**
Florentine	9.0	6.3	4.3	5.7	6.3
Shademaster II	8.7	5.3	5.3	6.0	6.3
LSD (0.05)	**2.5**	**3.4**	**2.2**	**1.6**	**1.3**

*PST-EFL= Aberdeen (BT: 9/27/2006)

Table 14. 2000 mean brown patch ratings of strong creeping red fescue cultivars grown at 2 locations in the US (9 = no disease)

Entry	ME1	ME2	Mean
Shademaster II	5.0	5.7	5.3
Florentine	5.0	4.7	4.8
PST-EFL*	**6.0**	**3.7**	**4.8**
Boreal	3.0	4.7	3.8
Common Creeping Red	2.7	2.7	2.7
LSD (0.05)	**2.2**	**3.1**	**1.9**

Table 15. 1999 mean brown patch ratings of strong creeping red fescue cultivars grown at 2 locations in the US (9 = no disease)

Entry	ME1	ME2	Mean
Florentine	7.7	6.7	7.2
Shademaster II	7.3	5.3	6.3
PST-EFL*	**6.7**	**5.0**	**5.8**
Boreal	3.7	3.7	3.7
Common Creeping Red	3.3	2.7	3.0
LSD (0.05)	**2.3**	**2.6**	**1.7**

Table 16. 2000 mean summer patch ratings of strong creeping red fescue cultivars grown at 2 locations in the US (9 = no disease)

Entry	NJ1	WI2	Mean
Jasper II	7.7	8.3	8.0
PST-EFL*	**7.3**	**8.0**	**7.7**
Shademaster II	6.7	6.7	6.7
Florentine	5.7	6.3	6.0
Boreal	2.0	6.3	4.2
LSD (0.05)	**2.2**	**1.8**	**1.4**

Table 17. 1999 mean summer patch ratings of strong creeping red fescue cultivars grown at 1 location in the US (9 = no disease)

Entry	NC1
Jasper II	8.0
Florentine	7.7
Shademaster II	7.3
PST-EFL*	**6.0**
Boreal	6.0
Common Creeping Red	5.0
LSD (0.05)	**1.3**

*PST-EFL=Aberdeen (ET: 9/27/2006)

Table 18. 1999 mean net blotch ratings of strong creeping red fescue cultivars grown at 1 location in the US (9 = least disease)

Entry	NJ2
PST-EFL*	**5.7**
Florentine	5.3
Shademaster II	5.3
Boreal	3.7
Common Creeping Red	3.0
LSD (0.05)	**1.9**

Table 19. 2000 mean pink snow mold ratings of strong creeping red fescue cultivars grown at 1 location in the US (9 = no disease)

Entry	ME2
Pathfinder	8.7
Florentine	8.0
PST-EFL*	**7.0**
Shademaster II	6.7
Boreal	6.0
Shademark	5.3
LSD (0.05)	**1.7**

Table 20. 2000 mean red thread/pink patch ratings of strong creeping red fescue cultivars grown at 1 location in the US (9 = no disease)

Entry	PA1
PST-EFL*	**6.0**
Shademaster II	5.7
Florentine	5.0
Boreal	4.7
LSD (0.05)	**1.3**

Table 21. Mean turf quality and leaf spot ratings for strong creeping red fescues in a fine fescue turf trial seeded fall of 1998 near Hubbard, OR. (9 = ideal; no disease)

	Turf Quality			Leaf Spot
Entry	1999	2000	Mean	1999
PST-EFL*	**5.5**	**5.5**	**5.5**	**6.3**
Florentine	5.4	5.3	5.3	6.3
Shademaster II	5.2	5.0	5.1	6.3
Boreal	4.6	4.8	4.7	4.7
LSD (0.05)	**0.7**	**0.8**	**0.6**	**1.3**

*PST-EFL = Aberdeen (ET: 9/27/2006)

Table 22. 2000 mean red thread and turf quality ratings for strong creeping red fescues in a fine fescue turf trial seeded fall of 1999 near Hubbard, OR. (9 = no disease; ideal quality)

Entry	Red Thread	Turf Quality
PST-EFL*	**7.0**	**6.0**
Florentine	3.7	5.5
Shademaster II	3.3	4.5
LSD (0.05)	**1.7**	**0.8**

*<PST-EFL>=Aberdeen
(8t:9/27/2006)

Table 23. 1999 mean leaf spot and turf quality ratings for entries in a fine fescue turf trial seeded fall of 1998 near Hubbard, OR. (9 = no disease; ideal quality) [includes entries in 1998 commercial national fine fescue trial]

Entry	Species	Owner	Leaf Spot	Turf Quality
Shadow II	Chewings	Standard Entry	7.7	7.1
Longfellow II	Chewings	International Seeds	6.3	6.4
PST-47TCR	Creeping	Pure Seed Testing	5.3	6.3
Barcrown	Sl. Creeper	Barenbrug	6.7	6.2
Treazure (E)	Chewings	AgriBioTech	6.7	6.1
ABT CHW 2	Chewings	AgriBioTech	5.7	6.1
Banner III	Chewings	Burlingham	6.3	6.1
4001	Hard	The Scotts Co.	7.3	6.0
PST-4FRR	Creeping	Pure Seed Testing	5.7	6.0
PST-4OD	Sl. Creeper	Pure Seed Testing	5.3	6.0
ABT CHW 3	Chewings	AgriBioTech	5.7	5.9
PST-4BBL	Creeping	Pure Seed Testing	5.7	5.9
Syn 4V3B	Creeping	Pure Seed Testing	5.7	5.9
PST-4EC Bulk	Chewings	Pure Seed Testing	5.3	5.9
PST-4FR	Creeping	Pure Seed Testing	6.7	5.8
SRX 52961	Strong Creeper	Seed Research	6.7	5.8
Brittany	Chewings	Lesco	5.0	5.8
Tiffany	Chewings	Turf-Seed, Inc.	5.7	5.8
Dawson	Sl. Creeper	Advanta	7.0	5.7
Bargreen	Chewings	Barenbrug	4.3	5.7
PST-4R3	Creeping	Pure Seed Testing	6.7	5.7
Victory II	Chewings	Pickseed	6.3	5.6
PST-EFL*	**Creeping**	**Pure Seed Testing**	**6.3**	**5.6**
Pick FRC 2-96		Pickseed	5.3	5.5
Camilla	Creeping	Turf-Seed, Inc.	6.7	5.5
Pick FRC 4-92	Chewings	Pickseed	5.3	5.5
Shadow	Chewings	Turf-Seed, Inc.	4.3	5.5
PST-4TDD	Creeping	Pure Seed Testing	5.3	5.5
ABT-HF1	Hard	AgriBioTech	6.7	5.4
ZFRR-93-112X		Zelder	6.3	5.4
SRX 3961	Hard	Seed Research	7.0	5.4
Baroxi		Barenbrug	4.3	5.4
PST-4PH	Creeping	Pure Seed Testing	6.3	5.4
MB 61		AgriBioTech	5.3	5.4
Nordic E	Hard	AgriBioTech	6.0	5.4
Dawson E	Sl. Creeper	Advanta-Standard	6.7	5.4
ISI FRR 5	Strong Creeper	International Seeds	5.3	5.4
SR 5100	Chewings	Seed Research	6.0	5.3
Florentine	Creeping	Standard Entry	6.3	5.3
MB 63	Chewings	Burlingham	5.7	5.3
ISI FL 11	Hard	International Seeds	5.7	5.3
Culumbra	Chewings	Fine Lawn Research	5.3	5.3
Syn 4RS	Hard	Pure Seed Testing	6.0	5.3
ISI FRR 7	Strong Creeper	International Seeds	5.7	5.3
Seabreeze	Sl. Creeper	Standard Entry	5.3	5.3
Jamestown II	Chewings	AgriBioTech	5.3	5.3
Shademaster II	Creeping	Turf-Seed, Inc.	6.3	5.2
Shademark	Strong Creeper	Lesco	5.0	5.2
Flyer II	Creeping	Pennington	6.0	5.2

*<PST-EFL> = Aberdeen (BT: 9/27/2006)

Table 23. 1999 mean leaf spot and turf quality ratings for entries in a fine fescue turf trial seeded fall of 1998 near Hubbard, OR. (9 = no disease; ideal quality) [includes entries in 1998 commercial national fine fescue trial] (Cont'd)

Entry	Species	Owner	Leaf Spot	Turf Quality
PST-4HM	Hard	Pure Seed Testing	5.7	5.1
MB 82	Hard	Burlingham	5.7	5.1
Barnica	Chewings	Barenbrug	3.3	5.1
Defiant	Hard	Lesco	6.0	5.1
PST-4MB	Blue Hard	Pure Seed Testing	5.7	5.0
PST-4CU	Hard	Pure Seed Testing	5.7	5.0
Aurora Gold	Hard	Turf-Seed, Inc.	5.7	5.0
Quatro	Sheep	Int'l Seed –Standard	5.3	5.0
PST-4CRE	Creeping	Pure Seed Testing	6.3	5.0
Sandpiper	Chewings	Research Seeds	5.0	5.0
PST-4AU	Hard	Pure Seed Testing	6.0	5.0
PST-47TH	Hard	Pure Seed Testing	5.7	4.9
Discovery	Hard	Standard Entry	5.3	4.9
Syn 4S3E	Slender Creeper	Pure Seed Testing	5.0	4.9
ABT HF-2	Hard	AgriBioTech	6.3	4.9
ISI FL 12	Hard	International Seeds	5.3	4.9
Laxton	Creeping	Turf-Seed, Inc.	5.7	4.9
Victory	Chewings	Pickseed	5.3	4.9
Syn 42RR	Creeping	Pure Seed Testing	4.0	4.9
Aurora E	Hard	Turf-Seed, Inc.	5.7	4.8
Scaldis	Hard	Standard Entry	5.7	4.8
SRX 5LAV	Strong Creeper	Seed Research	5.0	4.8
Reliant II	Hard	AgriBioTech	6.0	4.8
Spartan	Hard	Pickseed	5.7	4.8
Osprey	Hard	Research Seeds	6.3	4.7
ABT HF 4	Hard	AgriBioTech	6.7	4.7
PST-4HS Bulk	Hard	Pure Seed Testing	6.0	4.6
Boreal	Creeping Red	Standard Entry	4.7	4.6
Clio	Sheeps	Gie R.E.G.A.	5.0	4.6
PST-4UB	Blue Hard	Pure Seed Testing	5.7	4.5
Syn 4UG	Hard	Pure Seed Testing	5.3	4.5
SR 3200	Blue Hard	Seed Research	5.3	4.4
Bighorn	Sheeps	Turf-Seed, Inc.	5.0	4.4
PST-4HI	Blue Hard	Pure Seed Testing	5.0	4.3
Common Creeper		Standard Entry	4.3	4.3
PST-4BP Bulk	Creeping	Pure Seed Testing	3.0	3.9
SR 3100	Hard	Seed Research	7.3	3.7
LSD (0.05)			**1.3**	**0.7**

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AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

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EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

1. NAME OF APPLICANT(S)

Pure Seed Testing, Inc.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER

PST-EFL

3. VARIETY NAME

Aberdeen

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*

P.O. Box 449
Hubbard, OR 97032

5. TELEPHONE *(include area code)*

(503) ~~651-2130~~ 982-0419 (ET: 11/22/05)

6. FAX *(include area code)*

(503) 263-0703

7. PVPO NUMBER 200500150

8. Does the applicant own all rights to the variety? *Mark an "X" in appropriate block.* If no, please explain. ☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company?
If no, give name of country _____ ☒ YES ☐ NO

10. Is the applicant the original breeder? If no, please answer the following: ☒ YES ☐ NO
   a. If original rights to variety were owned by individual(s):
   Is (are) the original breeder(s) a U.S. national(s)? If no, give name of country

   b. If original rights to variety were owned by a company:
   Is the original breeder(s) U.S. based company? If no, give name of country ☒ YES ☐ NO

11. Additional explanation on ownership *(If needed, use reverse for extra space):*

Pure Seed Testing, Inc. has licensed Aberdeen to Turf-Seed, Inc.

PLEASE NOTE:

Plant variety protection can be afforded only to owners (now licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original breeder, both the original breeder and the applicant must meet one of the above criteria.

The original breeder may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

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